

an informality. Claims 1-23 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as its invention. In addition, Claims 1-7, 9, 10, 12-14, and 19-23 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.K. Patent No. GB 2,324,050 to Nicola. Claims 1-6, 12-15, and 18-21 were rejected under 35 U.S.C. § 102(b) as being anticipated by International Publication No. WO 95/26794 invented by Powell et al. The Examiner also rejected Claims 1 and 12-14 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,380,506 to Kimura et al. Furthermore, Claims 1-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nicola in view of U.S. Patent No. 4,380,506 to Kimura et al. The Examiner also rejected Claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over International Publication No. WO 95/26794 invented by Powell et al. and U.S. Patent No. 4,380,506 to Kimura et al. Applicant respectfully submits that these grounds of rejection have been overcome in light of the foregoing amendments and the following remarks.

In objecting to Claim 2, the Examiner requested that the abbreviation "HFC" be used in its unabbreviated form in its first occurrence, providing for abbreviations of its use thereafter. Applicant submits that the objection to the form of HFC in Claim 2 has been overcome by the foregoing amendment.

Claims 1-23 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 1, 19, and 20 in the present application have been amended to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the language deemed indefinite in

Claim 1 has been deleted by the foregoing amendment. The language of Claim 19 deemed indefinite has been amended substantially as suggested by the Examiner. In Claim 20, Applicant has further defined the composition of an extracted product obtained from the instantly claimed process.

In rejecting Claims 1-7, 9, 10, 12-14, and 19-23 under 35 U.S.C. § 102(a) as being anticipated by U.K. Patent No. GB 2,324,050 to Nicola, the Examiner points out that Nicola teaches a process for the extraction of at least one relatively polar component from organic material. The process of Nicola teaches the extraction of ginger extract from ginger root, marigold extract from marigold flowers, sage extract from sage leaves, thyme extract from ground thyme leaves, and rosemary extract from dried and ground *Rosemarinus officinalis* L. [Nicola, Examples 1-5, pages 7-11]. However, Nicola does not disclose or teach a process for simultaneously extracting a first and second component into an extract product.

The present claimed invention, by contrast, claims the use of solvent blends to extract two or more natural components into an extract product. Furthermore, the present claimed invention adds the limitation of isolating an extract product containing the first and second desired organic components. Clearly, Nicola does not teach or suggest the use of the recited process for simultaneously extracting first and second components that are isolatable into an extract product. Whereas as the process taught by Nicola exclusively enables a skilled artisan to extract polar components, the present application is not limited exclusively to the extraction of polar components [Nicola, Pages 1-2]. In addition, Nicola teaches that a extracted component exhibiting pharmaceutical or pesticide activity is likely to derive from a pharmaceutical product or an intermediate

produced from the fermentaion of mycelial or fungal culture or a product from a synthetic chemical reaction [Nicola, Page 6, lines 28-35]. The claims, as amended, require an extract product containing first and second biologically and/or naturally desirous components. Accordingly, Nicola cannot support a rejection of the present invention under 35 U.S.C. § 102(a) and Applicant respectfully requests withdrawal of the rejections based on 35 U.S.C. § 102(a).

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The foregoing amendments to Claims 1, 19, and 20 patentably distinguishes Applicant’s invention from that disclosed in the prior art so as to place the present application in a condition whereby it is not anticipated by Nicola. Despite the Examiner’s assertion that “[t]he final isolated products disclosed by Nicola would inherently contain the two or more components instantly claimed,” such a statement does not satisfy the “inherent” quality of a disclosure as required by the CAFC. *See Verdegaal Bros.*, 2 U.S.P.Q.2d at 1053. The Examiner’s statement is conclusory and unsupported by the Nicola reference, and as such, Nicola cannot support a rejection of the present invention under 35 U.S.C. § 102(a). Accordingly, Applicant respectfully requests withdrawal of the rejections based on 35 U.S.C. § 102(a) and relying on the Nicola reference.

The Examiner next rejected Claims 1-6, 12-15, and 18-21 under 35 U.S.C. § 102(b) as being anticipated by International Publication No. WO 95/26794 invented by Powell et al. In rejecting Claims 1-6, 12-15, and 18-21, the Examiner points out that

Powell et al. teach a process for the extraction of natural products using a mixture of tetrafluoroethane and one or more cosolvents. The process of Powell et al. teaches the extraction of oil from ground cumin and the extraction of monensin, paclitaxel, and cytochalasin from yew tree needles harvested from the European Yew [Powell et al., Examples 1-11, pages 9-18]. However, Powell et al. does not disclose or teach a process for simultaneously extracting natural components into an extract product.

The present claimed invention, by contrast, claims the use of solvent blends to extract two or more natural components into an extract product. Furthermore, the present claimed invention adds the limitation of isolating an extract product containing first and second desired organic components. Clearly, Powell et al. does not teach or suggest the use of the recited process to simultaneously isolate an extract product containing first and second biologically desirous components. Whereas the process taught by Powell et al. enables a skilled artisan to extract oils from organic materials, as is demonstrated by the expression of yield as "percentage of oil extracted," the present invention and its related application are directed to the simultaneous extraction of natural components not limited to oil extract. [Powell et al., Tables 1-3]. In addition, Powell et al. teaches that suitable pharmaceutically active substances which may be extracted using the recited process of the Powell et al. invention include the penicillins, the alkaloids, paclitaxel, monensin, and cytochalasin, all of which are extractable from yew tree products, such as the bark or needles harvested from the yew tree [Powell et al., Page 3]. The claims, as amended, require an extract product containing first and second naturally desirous components. Accordingly, Powell et al. cannot support a rejection of the present invention under 35 U.S.C. § 102(b) and Applicant respectfully requests withdrawal of the rejections based on

35 U.S.C. § 102(b).

The Court of Appeals for the Federal Circuit ("CAFC") and its predecessor court have had numerous opportunities to interpret the statutory language of 35 U.S.C. §102(b). Accordingly, issues relating to the anticipatory nature of prior art under section 102(b) are resolved by applying the precedent established and adopted by the CAFC. In terms of identifying what anticipation is, the court has stated that, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *See Verdegaal Bros.*, 2 U.S.P.Q.2d at 1053. In terms of identifying what an anticipating reference is, the court has stated that, "[t]o be prior art under section 102(b) the reference must put the anticipatory subject matter at issue into the possession of the public through an enabling disclosure." *Chester v. Miller*, 15 U.S.P.Q.2d 1333, 1336 n.2 (Fed. Cir. 1990). In other words, "[a] reference cannot anticipate that which it does not enable." *University of California v. Eli Lilly and Co.*, 39 U.S.P.Q.2d 1225, 1242 (S.D. Ind. 1995), *aff'd*, 43 U.S.P.Q.2d 1398 (Fed. Cir. 1997), *cert. denied*, 118 S. Ct. 1548 (1998).

By applying the above-stated CAFC rules for interpreting prior art under 102(b), it becomes evident that the Powell et al. cannot stand as an anticipating prior art reference. First, each and every element as set forth in the claims 1-23 is not found, either expressly or inherently, in the Powell et al. reference. *Verdegaal Bros.*, 2 U.S.P.Q.2d at 1053. The Powell et al. reference does not disclose a process for simultaneously extracting first and second components that are isolatable into an extract product. Despite the Examiner's assertion that "[t]he final isolated products disclosed by Powell et al. would inherently contain the two or more components instantly claimed,"

such a statement does not satisfy the "inherent" quality of a disclosure as required by the CAFC. See *Verdegaal Bros.*, 2 U.S.P.Q.2d at 1053. The Examiner's statement is conclusory and unsupported by the Powell et al. reference, and as such, Powell et al. cannot support a rejection of the present invention under 35 U.S.C. § 102(b). Accordingly, Applicant respectfully requests withdrawal of the rejections based on 35 U.S.C. § 102(b) and relying on the Powell et al. reference.

The Examiner also rejected Claims 1 and 12-14 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,380,506 to Kimura et al. In rejecting Claims 1 and 12-14, the Examiner points out that Kimura et al. teach a process for obtaining polar antioxidant compounds from botanical materials using well-known organic solvents and blends thereof. The process of Kimura et al. teaches the extraction of anti-oxidant and anti-bacterial ingredients from starting material resulting in extractive which is dried into a solid preservative having anti-oxidant and anti-bacterial action [Kimura et al. Colmn. 2, Lines 30-34]. However, Kimura et al. does not disclose or teach a process for simultaneously extracting biological components into an extract product that yields an oily, liquid antioxidant.

The present claimed invention, by contrast, claims the use of solvent blends to extract components into an extract product. Furthermore, the present claimed invention adds the limitation of isolating an extract product containing first and second desired organic components. Clearly, Kimura et al. does not teach or suggest the use of the recited process to simultaneously isolate an extract product containing first and second naturally desirous components. Whereas the process taught by Kimura et al. enables a skilled artisan to extract through a series of steps an anti-oxidant paste and an anti-

bacterial powder from herb starting material, the present invention and its related application are directed to the simultaneous extraction of natural components not limited to a resulting paste or powder, and the present invention requires fewer isolation steps [Kimura, Colmn. 6, Lines 47-52 and 65-68; Colmn. 7, Lines 1-8]. In addition, Kimura et al. teaches that the preferred polar solvent is ethanol and the preferred non-polar solvents are n-hexane and petroleum ether [Kimura, Colmn. 5, lines 5-15]. In the instant Application, acetone and methanol are preferred in a solvent blend over ethanol, and n-hexane is utilized only as a blended co-solvent constituent. Furthermore, as amended, the claims require an extract product containing first and second naturally desirous components. Accordingly, Kimura et al. cannot support a rejection of the present invention under 35 U.S.C. § 102(b) and Applicant respectfully requests withdrawal of the rejections based on 35 U.S.C. § 102(b).

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does not enable.” *University of California v. Eli Lilly and Co.*, 39 U.S.P.Q.2d at 1242.

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The Examiner next rejected Claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Nicola in view of U.S. Patent No. 4,380,506 to Kimura et al. Applicant respectfully disagrees and submits that the combination of the Nicola and Kimura et al. references would necessarily constitute an extraction process different from that of Applicant. The Examiner points out that Nicola teaches a process for the extraction of at least one relatively polar component from organic material. More accurately, Nicola teaches the extraction of ginger extract from ginger root, marigold extract from marigold flowers, sage extract from sage leaves, thyme extract from ground



thyme leaves, and rosemary extract from dried and ground *Rosemarinus officinalis* L. [Nicola, Examples 1-5, pages 7-11]. However, Nicola does not disclose or teach a process for simultaneously extracting a first and second component into an extract product.

The present claimed invention, by contrast, claims the use of solvent blends to extract two or more natural components into an extract product. Furthermore, the present claimed invention adds the limitation of isolating an extract product containing the first and second desired organic components. Clearly, Nicola does not teach or suggest the use of the recited process for simultaneously extracting first and second components that are isolatable into an extract product. Whereas as the process taught by Nicola enables a skilled artisan to extract polar components, the present application is not limited exclusively to the extraction of polar components [Nicola, Pages 1-2]. In addition, Nicola teaches that an extracted component exhibiting pharmaceutical or pesticide activity is likely to derive from a pharmaceutical product or an intermediate produced from the fermentation of mycelial or fungal culture or a product from a synthetic chemical reaction [Nicola, Page 6, lines 28-35]. The claims of the instant application, as amended, require an extract product containing first and second biologically and/or naturally desirous components.

The Examiner suggests that the method of Nicola, teaching a process for the extraction of at least one relatively polar component from organic material, in combination with Kimura et al., teaching a process for obtaining polar antioxidant compounds from botanical materials using well-known organic solvents and blends thereof, renders obvious the extraction process recited by the Applicant. However,

neither the process of Nicola nor the process of Kimura et al. identify a solvent blend and extraction parameters for the extraction of antioxidants while attaining high specific activity and retaining high extraction yields, including a liquid oily extract and extracts of essential oils [Greaves Specification, page 5, lines 9-16]. In considering the extraction process that would result from the combination proposed by the Examiner of the Nicola and Kimura et al. references, the result would necessarily constitute a different extraction process from that of the Applicant, and one that would not accomplish the result of the process comprising the identification of a solvent blend and extraction parameters for the extraction of antioxidants while attaining high specific activity and retaining high extraction yields, including a liquid oily extract and extracts of essential oils. Based on the foregoing, Applicant respectfully requests withdrawal of the 103(a) rejections based on Nicola in view Kimura et al.

The Examiner is relying upon hindsight, having knowledge of the Applicant's own method. But for this knowledge, the combination of references would not have occurred to the Examiner, as it did not occur to those skilled in the art to make the asserted combination. In other words, the combination proposed by the Examiner is being made only in light of his or her knowledge of the applicant's disclosure.

The Examiner also rejected Claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over International Publication No. WO 95/26794 invented by Powell et al. and U.S. Patent No. 4,380,506 to Kimura et al. Applicant respectfully disagrees and submits that the combination of the Powell et al. and Kimura et al. references would necessarily constitute an extraction process different from that of Applicant. The Examiner points out that Powell et al. teach a process for the extraction of natural

products using a mixture of tetrafluoroethane and one or more cosolvents. More accurately, Powell et al. teach the extraction of oil from ground cumin and the extraction of monensin, paclitaxel, and cytochalasin from yew tree needles harvested from the European Yew [Powell et al., Examples 1-11, pages 9-18]. However, Powell et al. does not disclose or teach a process for simultaneously extracting natural components into an extract product.

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cosolvents, in combination with Kimura et al., teaching a process for obtaining polar antioxidant compounds from botanical materials using well-known organic solvents and blends thereof, renders obvious the extraction process recited by the Applicant. However, neither the process of Powell et al. nor the process of Kimura et al. identify a solvent blend and extraction parameters for the extraction of antioxidants while attaining high specific activity and retaining high extraction yields, including a liquid oily extract and extracts of essential oils [Greaves Specification, page 5, lines 9-16]. In considering the extraction process that would result from the combination proposed by the Examiner of the Powell et al. and Kimura et al. references, the result would necessarily constitute a different extraction process from that of the Applicant, and one that would not accomplish the result of the process comprising the identification of a solvent blend and extraction parameters for the extraction of antioxidants while attaining high specific activity and retaining high extraction yields, including a liquid oily extract and extracts of essential oils. Based on the foregoing, Applicant respectfully requests withdrawal of the 103(a) rejections based on Powell et al. in view Kimura et al.

The Examiner is relying upon hindsight, having knowledge of the Applicant's own method. But for this knowledge, the combination of references would not have occurred to the Examiner, as it did not occur to those skilled in the art to make the asserted combination. In other words, the combination proposed by the Examiner is being made only in light of his or her knowledge of the applicant's disclosure.

Accordingly, the purpose of the claimed invention is not taught nor suggested by the cited reference, nor is there any suggestion or teaching that would lead one skilled in the relevant art to combine references in a manner that would meet the purpose of the

claimed invention. Because the cited reference, whether considered alone, or in combination with others, does not teach nor suggest the purpose of the claimed invention, Applicant respectfully submits that the claimed invention, as amended, patentably distinguishes over the prior art, including the art cited merely of record.

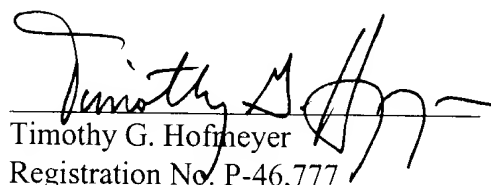
Based on the foregoing, Applicant respectfully submits that claims 1-23, as amended, are in condition for allowance at this time, patentably distinguishing over the cited prior art. Accordingly, reconsideration of the application and passage to allowance are respectfully solicited.

The Examiner is respectfully urged to call the undersigned attorney at (515) 288-2500 to discuss the claims in an effort to reach a mutual agreement with respect to claim limitations in the present application which will be effective to define the patentable subject matter if the present claims are not deemed to be adequate for this purpose.

Respectfully submitted,

Date: \_\_\_\_\_

9/11/00



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